People

Picatinny employees honored at Federal Executive Board event

By Audra Calloway, Picatinny Public Affairs



Defense Contract Management Agency team leader Robert Nagy (from left), DCMA team leader Tom Guzzo, Senior Quality Assurance Specialist Ray Robaldo, Awards Committee Chairwoman Andrea J. Quarantillo of the U. S. Customs and Immigration Service, DCMA Springfield Director Gerald Richardson and DCMA team leader Dennis Burke pose for a picture at the ceremony. (Courtesy photo).

The Federal Executive Board of Metropolitan Northern New Jersey honored a Picatinny employee and team at the organization's recent annual awards breakfast in Newark, N.J.

Picatinny's Raymond Robaldo, senior quality assurance specialist for the Defense Contract Management Agency-Springfield, was one of 16 federal workers honored. The board awarded Robaldo its 2006 Initiative Award for his efforts to streamline business practices.

Robaldo was a catalyst for the successful implementation of Wide Area Workflow within the Metropolitan Northern New Jersey Area and beyond. He was responsible for developing a lesson plan and training the DCMA Springfield customer and contract community to transition from paper invoicing to electronic invoicing.

In addition, Picatinny's Countermeasure Flares team from the office for the Project Manager for Close Combat Systems was presented with the 2006 FEB team award. The team was recognized for its tireless efforts coordinating with contractors in order to meet the Army's increased demand for the life-saving M211, M212 and M206 Countermeasure Flares.

The Countermeasure Flares team provided exceptional management of the delivery process, expediting clearance and shipment of materials through a combination of

constant communication and quick action. The Countermeasure Flare team holds the distinction of being the only team recognized at the 2006 FEB awards ceremony.

The FEB is made up of representatives from all the federal agencies that are located in the region. It helps Washington, D.C., and federal field offices exchange information about federal programs, management strategies and administration. The board also encourages employee initiative and better performance through special recognition and other incentive programs and manages the region's yearly Combined Federal Campaign.

Fort Monmouth civilian receives DoD's highest civilian honor

FORT MONMOUTH, N.J. -- The U.S. Department of Defense honored, Victor Ferlise, deputy to the commanding general for operations and support for the Communications-Electronics Lifecycle Management Command, with its highest civilian honor, the Distinguished Civilian Service Award, in a recent Pentagon ceremony.



Victor Ferlise, deputy to the commanding general for operations and support for the Communications-Electronics Lifecycle Management Command, was awarded the Distinguished Civilian Service Award.

The award was presented on behalf of Secretary of Defense Donald Rumsfeld by Deputy Secretary of Defense Gordon England. The Distinguished Civilian Service Award recognizes outstanding DOD civilian employees whose careers reflect exceptional devotion to duty and extremely significant contributions of a broad scope to the efficiency, economy or other improvement in the operation of the Department of Defense.

Serving as deputy to the commanding general since 1992, Ferlise is responsible for six of the C-E LCMC's main business units, including the Logistics and Readiness Center, the

Acquisition Center and the Software Engineering Center. Under his oversight, the command has reduced acquisition cycle time by 60 percent and saved more than \$93 million due to reduced costs and streamlined acquisition techniques.

Ferlise has provided critical supply support to Soldiers deployed in support of Operations Iraqi and Enduring Freedom. Among his notable achievements, he provided personal supervision for the Firefinder radar program in Southwest Asia, resulting in unprecedented system readiness. Firefinder is an artillery locating radar system credited with saving the lives of warfighters by virtually neutralizing enemy artillery fire.

Ferlise has also worked on acquisition projects for the Defense Department, including a congressionally-mandated Section 912 Cross Service Study Group. This study developed the rapid response to critical systems requirements contract, which allows the rapid acquisition of a wide range of technical and support services. It was used to provide security services for the Coalition Provisional Authority in Baghdad in less than 10 days.

He was also a member of the Source Selection Advisory Council for all 10 of the design-build contracts awarded under Iraqi Infrastructure Reconstruction with a total value of \$10 billion.

"Vic Ferlise has provided exceptional service to this command, the Army and the nation," said C-E LCMC Commanding General Maj. Gen. Michael Mazzucchi. "By streamlining acquisition processes he has saved millions of taxpayer dollars and ensured timely delivery of critical, life-saving equipment and technology to Soldiers serving in the Global War on Terrorism. I'm delighted to see him recognized for his efforts."

Ferlise entered federal service in 1971 at Fort Monmouth. He previously served as the chief counsel here, and was appointed to the Senior Executive Service in 1983. He holds a bachelor of science in engineering from Newark College of Engineering, now the New Jersey Institute of Technology, a Juris Doctor from Temple University School of Law and a masters of business administration from Fairleigh Dickinson University.

During his career, Ferlise has earned other prestigious civilian awards and decorations, including the Army's top civilian honor, the Decoration for Exceptional Civilian Service, and three Senior Executive Service Presidential Rank Awards. He is also a recipient of the 2002 Roger Jones Award for outstanding Executive Leadership in the Federal Sector from American University, and was the 2003 Distinguished Alumnus of New Jersey Institute of Technology.

NCMA recognizes Picatinny employee for accomplishments

By Marion Doyle, The Picatinny Voice



Lori Deara was recently awarded the 2006 James E. Cravens Award for Outstanding Membership Accomplishments for her outstanding membership accomplishments during the past NCMA program year.

The National Contract Management Association recently selected Picatinny employee Lori Deara to receive the 2006 James E. Cravens Award for Outstanding Membership Accomplishments.

The award is designed to recognize NCMA chapters and individual members for outstanding membership accomplishments during the past NCMA program year. It is intended to highlight achievements in membership recruitment and retention. Deara is currently the group director for the Maneuver Ammunition Systems Group, Picatinny Center for Contracting and Commerce. She entered federal service in 1993 and has been a member of NCMA since 1994.

She is a certified federal contracts manager, and has been the contracting officer on such programs as the Advanced Infrared Countermeasure Munitions program that consists of the XM211 and XM212 decoys, the 105 mm High Explosive-Tactical and Target Practice-Tracer cartridges in support of the Stryker Mobile Gun System and the 120 mm M829A2 Armor-Piercing, Fin-Stabilized, Discarding Sabot -Traced cartridge in support of the Abrams tank.

She is a three-time past president and national director of the Picatinny Chapter of NCMA and is currently on the chapter's board of advisors. Deara currently holds a bachelors degree from Seton Hall University and is Level-3 Certified in Contracting, Level-1 Certified in Logistics and Level-1 Certified in Program Management.

She is a past recipient of NCMA's Albert Berger Award and the Northeast Regions Spot Light Award. Deara is a dedicated advocate to the mentor and protégé program here at Picatinny. She is also a mentor for NCMA's New Leadership Development Program.

PM CCS Countermeasure Flares Team receives David Packard acquisition award

By Jennifer M. Keating, The Picatinny Voice



Members of the Countermeasure Flares Team and officials pose after the ceremony for the David Packard Excellence in Acquisition Award (front row from left) Mary S. Adams, Maj. Gen. Paul S. Izzo, Kenneth J. Krieg, Rene Medina, Col. William W. Stevenson, Claude M. Bolton Jr. and Santo Lombardo. Also shown are June DeSalvio (back row from left), Kelly Gorman, Sandra LaBell, Maj. Keith Taylor, Amanda Amoroso and Robert J. Ritchie. (Courtesy photo).

The Countermeasure Flares Team from the office of the Project Manager for Close Combat Systems here received the David Packard Excellence in Acquisition Award in recognition of their outstanding work in the field of acquisition logistics Nov. 8.

The Packard Award is the highest honor the Department of Defense can bestow upon acquisition professionals. It is presented to civilian and military organizations that have significantly contributed or have demonstrated exemplary innovations and best practices in the Defense acquisition process. This is the second year in a row the Program Executive Office for Ammunition has been recognized for acquisition excellence.

Last year, the 40 mm Systems Contracting Team of the Project Manager for Maneuver Ammunition Systems received the Packard award for its contributions. The Countermeasure Flares Team members earned the distinguished award for their hands-on coordination with contractors to meet the Army's accelerated demand for the life-saving M211, M212 and M206 flares.

Through a combination of acquisition expertise, constant communication and quick action, the team provided exceptional management of increasingly larger contracts for countermeasure flares and production facility expansion to support higher production

rates and an accelerated delivery process, expediting clearance and direct shipment of completed flares to Iraq.

The Countermeasure Flares Team received the award in conjunction with the Armament Research, Development and Engineering Center, the Rock Island-based Joint Munitions Command, the contracting staffs of the TACOM Life Cycle Management Command and the Army Field Support Command, and Communication Command's Infra-Red Flares Team.

RDECOM employee receives national award for excellence

By Larry D. McCaskill, Research, Development and Engineering Command Public Communications



James K. Warrington, Executive Director, RDECOM Acquisition Center and Robert Tomko, chief, Adelphi Contracting Division, congratulate Barbara Gerace on her being named this year's Ida Ustad Award recipient. (Photo by Larry McCaskill).

Barbara Gerace has been awarded the 2006 Ida Ustad Award for Excellence in Acquisition by the Government Services Administration.

The award recognizes an individual government employee whose actions demonstrate or embody them as a business leader/advisor. This award honors Ustad, a former Deputy Associate Administrator for Acquisition Policy with the General Services Administration, who died in 1999.

A U.S. Army Research, Development and Engineering Command contracting officer, Gerace's diligence and hard work was instrumental in developing contracts enabling systems to be rapidly fielded in Southeast Asia in support of the Global War on Terrorism.

"I was surprised. I knew there were so many award-worthy contracting professionals who were also nominated," said Gerace, who has been at White Sands Missile Range, N.M. since 1994.

A former high school teacher who discovered that her calling was beyond the classroom, Gerace has developed close ties with her coworkers and team at her New Mexico facilities as well as her supervisor and co workers located on the across the country in the RDECOM Acquisition Center in Aberdeen, Md.

"I find Ms. Gerace to be one of the most customer oriented professionals I have ever worked with – her ability to understand a requirement and apply innovative approaches has led to inordinate success on her actions," said her supervisor, Lee Hess. "She is always attuned to thinking outside the box thus offering her customers the flexibility they require in pursuit of their contracting objectives."

It's the extra step she's willing to take that helped her implement philosophical process management techniques she learned of while taking Lean Six Sigma training on-line through the Defense Acquisition University. Her team continuously captured and evaluated acquisition data and information in order to stream line the process.

News Briefs

PBCA receives safety award

PINE BLUFF ARSENAL, Ark. -- The Pine Bluff Chemical Activity was recently presented a safety award from the Arkansas Department of Labor and the Arkansas Worker Compensation Commission.

The award, presented to Lt. Col. Casey P. Scott, commander of PBCA, is in recognition of one year worked without a lost time accident. Representing the Arkansas DOL was Richard Stewart, program support manager and presenting on behalf of the Arkansas Worker Compensation Commission was Pat Burge, director of Health and Safety.

Under Secretary of the Army visits Night Vision and Electronic Sensors Directorate

By Gena Osborn, Night Vision and Electronic Sensors Directorate Public Affairs



John Hodapp explains the Convoy Escort Vehicle to Honorable Pete Geren while Col. Chuck Taylor, Lt. Col. Mark Arn and Bill Jarvis look on.

On Nov. 2, Night Vision and Electronic Sensors Directorate enlisted scientists and engineers across several divisions to present current night vision technologies for a visit by the Honorable Pete Geren, Under Secretary of the Army, who was accompanied by Col. Chuck Taylor, executive officer to the Under Secretary, and Lt. Col. Mark Arn, military assistant, Office of the Under Secretary.

In order to understand the scope of what NVESD provides to the warfighter, scientists and engineers demonstrated several systems to Geren, including the Combat Periscope, Cerberus, Fido, and the Convoy Escort Vehicle. Later, Geren was given hands-on demonstrations of image intensifier night vision goggles, Thermal Weapon System, a live-fire demo, and several other night vision technologies inside the indoor firing tunnel.

During the visit, NVESD Director Dr. Fenner Milton presented an overview of the CERDEC NVESD that included a presentation of the directorate's support to the warfighter in Operations Enduring and Iraqi Freedom. One item of particular interest to Geren was Helios, a laser warning device that deters hostile approaching vehicles.

Taylor was able to share an account of his personal experience with Helios at a vehicle checkpoint. He explained that when Helios was pointed at the armored vehicle he was driving, the light in his eyes was so bright that he was forced to stop the vehicle. Taylor feels that Helios is an excellent method to deter would-be attackers from bombing vehicle check-points.

All of the technologies shown to Geren were well received. He remarked that he enjoyed his visit and appreciated the hard work of everyone who assisted in the visit.

Red River Army Depot introduces fuel recycling program

RED RIVER ARMY DEPOT, Texas -- Red River Army Depot employees have used Lean-based methods to implement the process of recycling fuel for various vehicle programs.

Currently, 2,000 gallons of Heavy Expanded Mobility Tactical Truck fuel is being cleaned and reused each month. Red River's goal is to build a 20,000 gallon tank in a central location that will enable the depot to clean and reuse all fuel evacuated from every vehicle program. The implementation of this fuel recycling program will save the depot approximately \$1.50 per gallon.

Army system completes mission at Pine Bluff Arsenal

PINE BLUFF ARSENAL, Ark. -- The U.S. Army Chemical Materials Agency recently accomplished another milestone in its mission of "creating a safer tomorrow" – the completion of Rapid Response System operations.

The RRS, managed and developed by CMA's Non-Stockpile Chemical Materiel Project, destroyed more than 5,300 Chemical Agent Identification Set items since it started operations here in August 2005.

CAIS were once used to train Soldiers and civilians to identify and handle chemical agents. More than 170,000 CAIS items were manufactured and distributed from 1928 until 1969 throughout the United States. The sets of glass vials, bottles and ampoules contain small quantities of the chemical agents mustard and lewisite, or industrial chemicals.

System Manager Richard DiMauro said dedication from contracted operator Teledyne Brown Engineering and support from the arsenal, Pine Bluff Chemical Activity and CMA, helped make the project a success.

"The RRS has finished CAIS operations one year ahead of schedule," he explained. "We are under budget, and have reduced our secondary wastes by more than half."

The RRS is a transportable chemical neutralization system that safely processes the contents of CAIS. It consists of an operations trailer and various support trailers. The operations trailer, where the chemical neutralization takes place, houses a three-station glove box that allows operators to unpack, sort and neutralize CAIS items. Negative pressure inside the trailer and glove box prevent accidental vapor release. Air is processed through carbon filters to protect workers and the environment. The air is monitored for agent at several points during the process.

This was the system's third major deployment. RRS was first used at Deseret Chemical Depot, Utah, in 2001 and Fort Richardson, Alaska, in 2003 to destroy recovered CAIS items.

The RRS is the third major NSCMP project completed at Pine Bluff Arsenal. NSCMP concluded operations at the Pine Bluff Binary Destruction Facility and the Pine Bluff

Munitions Assessment System within the last year. Other non-stockpile projects at the arsenal include the ongoing Explosive Destruction System mission, the Pine Bluff Ton Container Decontamination Facility, and the beginning of the German Traktor Rocket Separation System campaign.

Army stands up newest life cycle management command

New organization aligns joint munitions and lethality programs



The tri-service color guard passes the official party during the stand-up ceremony for the Army's newest life cycle management command here Nov. 30. (U.S. Army photo).

PICATINNY ARSENAL, N.J. -- The Army formally unveiled its newest command, the Joint Munitions and Lethality Life Cycle Management Command, Nov. 30 during a brief noontime ceremony.

The new command is collocated at Picatinny Arsenal, N.J., and Rock Island Arsenal, Ill. It aligns three organizations that execute the Army's munitions and lethality mission - the Program Executive Office for Ammunition and the Armament Research, Development and Engineering Center and the Joint Munitions Command - under the Army Materiel Command, Fort Belvoir, Va.

The new LCMC brings together the Army's full munitions acquisition, logistics and technology capabilities to form a more effective life cycle management process for conventional ammunition. It will establish a closer relationship between the three organizations to deliver products to the warfighter more quickly at less cost. All three organizations will continue to report to their respective headquarters. Maj. Gen. Paul S. Izzo has been designated to lead the new command, which will be headquartered here.

A number of senior military and civilian officials took part in the ceremony including the Army's top acquisition executive, Claude M. Bolton Jr., assistant secretary of the Army for acquisition, logistics and technology, Gen. Benjamin S. Griffin, commanding genera, Army Materiel Command, and Lt. Gen. N. Ross Thompson III, military deputy to the assistant secretary of the Army for acquisition, logistics and technology.

U.S. Rep. Rodney Frelinghuysen, who represents Picatinny, also spoke. Frelinghuysen said that being on a wartime footing requires the Army and other military services do things differently - to do them better, to transform themselves. "And that's why this new command is born," he said, "for the benefit of all our warfighters, not just the Army, but all our military services."

The new LCMC will support munitions requirements of all the military services. Of the command's stand up, the congressman said, "This is a good day for the arsenal and for the Army, but most important it's a good day for the men and women who truly do the work of freedom - our Soldiers and Marines, sailors and airmen of our military."

In a brief welcome, Izzo explained why the new command is being created.

"The LCMC will integrate the people, organizations, infrastructure and processes necessary for the effective life-cycle management of conventional munitions for the warfighter," he said. "Our objective in support of 'Army Strong' is to have the best munitions in the right place, at the right time, at the right cost."

Bolton and Griffin also spoke briefly during the ceremony. Bolton echoed that the overarching motivation in setting up these commands is to provide the warfighter the right product, at the right place, at the right time. He explained it was also an opportunity to bring together two communities - the acquisition community and logistics community.

As a result, he said that "The benefits to the Army, and certainly to the Soldier, are unbelievable — both in terms of getting systems and equipment to the warfighter quicker and sustaining those items once they got to the field."

"Munitions," said Bolton, "are certainly important to the Army's mission. (And they are) critically important to our men and women - particularly to those on the frontlines of this global war on terrorism."

Griffin called the creation of an LCMC for joint munitions and lethality a way of providing more efficient support and a better product to the warfighter customer.

"We do a couple things with LCMCs. We combine acquisition, research and development and (logistics) and maintenance," he said explaining that the combination provides for a win-win situation. "It takes all three of those, that team, (to be a success)."

In addition to the speakers, a tri-service color guard representing the Army, Navy and Marine and a brass quintet from the 389th Army Band "AMC's Own" took part in the ceremony.

BAE Systems awarded contracts worth \$1.16 billion to partner with TACOM-LCMC's RRAD

YORK, Penn. -- BAE Systems has received contract modifications worth \$1.16 billion from the U.S. Army TACOM Life Cycle Management Command to remanufacture and

upgrade 610 Bradley Combat Systems and to provide spare components for these systems.

BAE Systems, working through its Public/Private Partnership with Red River Army Depot, will remanufacture and upgrade 490 Bradley A3 systems and 120 Bradley A2 systems under the awards. Initial disassembly and subsystem rebuild will be performed at RRAD, final disassembly and structural modifications will be performed by BAE Systems in Fayette County, Pennsylvania and final assembly, integration and test will be conducted at the BAE Systems facility in York, Pennsylvania.

"Bradleys have been delivering excellent capability to our war fighters since March 2003," said Andy Hove, BAE Systems' director of Bradley Combat Systems. "BAE Systems and RRAD are focused on ensuring these critical combat systems get into soldier's hands as quickly as possible."

Work on the contracts will begin immediately, with deliveries scheduled to begin in April 2008 and run through April 2009. Bradley Combat Systems continue to provide outstanding survivability, mobility and lethality to U.S. soldiers in all types of close-combat urban scenarios and in open-combat, open-terrain scenarios over three completed rotations.

The Bradley fulfills five critical mission roles – infantry fighting vehicle, cavalry fighting vehicle, fire support vehicle, battle command vehicle and engineer squad vehicle - for the Army's Heavy Brigade Combat Teams. Bradley Combat Systems are playing a critical role in the success of the Army's HBCTs during Operation Iraqi Freedom, where operational readiness has exceeded 94 percent in urban and cross-country missions that have covered more than eight million miles.

The Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance -equipped, network-enabled Bradley Combat Systems feature a proven set of survivability solutions designed to protect soldiers against a wide variety of threats. BAE Systems has been awarded contracts totaling \$501 million under fiscal year 2006 funding for reset and remanufacturing of 545 Bradleys.

The current award for 610 Bradleys at \$1.16 billion is under fiscal year 2007 funding. Approximately 620 Bradley A3 vehicles have been delivered against the Army's requirement for more than 2,000 total Bradley A3s planned for the fleet.

Armor Holdings and RRAD partner on FMTV program

RED RIVER ARMY DEPOT, Texas -- Once again Red River Army Depot is expanding its partnerships to include a Public/Private Partnership with Armor Holdings, Inc. as part of a \$24.7 million contract for work on the Family of Medium Tactical Vehicles. This is the first project for RRAD involving the FMTVs.

"The program is breaking new ground at Red River and postures us to expand to other similar programs in the future," said Dennis Lewis, chief of RRAD's business office.

Lewis said the depot will work on 300 vehicles during 2007, with an option for an additional 300 trucks in 2008 and 2009.

The Armor Holdings Aerospace & Defense Group offers armor solutions for the FMTV, MTVR and the M939. More recently the Armor Holdings Aerospace & Defense Group designed and manufactured the armor components for the Low Signature Armored Cab for FMTVs, adding ballistic and mine blast protection in a purpose-built cab that can be interchanged with a standard FMTV cab in eight hours.

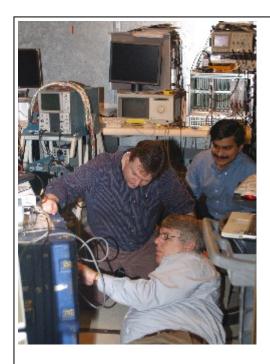
The Tactical Vehicle Systems Division's FMTV is the first to pass the Army 22-year accelerated corrosion test. It is also the first tactical truck to field 14 variants. Since the start of the program in 1988, 34,000 FMTV have been manufactured for military forces and government contractors. As the exclusive supplier of the FMTV to the U.S. Army, TVSD offers over sixteen truck variations on two basic platforms – the Light Medium Tactical Vehicle and the Medium Tactical Vehicle.

The flexibility of the FMTV platform has fueled the development of new and exciting variants, such as Hybrid Electric Drives, 9-ton Load Handling Systems, HIMARS, 10-ton dump, the FMTV 8 x 8 Flex-Frame and the Height Reducible Electronic Enclosure.

"These medium truck orders represent additional backlog in 2007 and beyond," said Robert Schiller, president of Armor Holdings, in a statement. "We are particularly pleased to work with the U.S. Army at Red River and anticipate this contract is the beginning of a long and beneficial relationship in support of our customer's FMTV reset program."

Army demonstrates 'most significant change to satellite communications worldwide' in 30 years

By Timothy Rider, Fort Monmouth Public Affairs



CERDEC engineer, Rick Dunnegan (laying), Friedrich "Fritz" Fisher, L3 engineer and Deep Gupta, Ph.D., vice president, research and development HYPRES Inc., prepare to demonstrate direct digitization of a SATCOM traffic at the X-Band range -- a scientific breakthrough in satellite communications that was accomplished later that evening. (Photo by Kashia Simmons).

U.S. Army researchers and their industry partners recently accomplished a major satellite communications breakthrough. The researchers and engineers, who have reduced racks of satellite equipment to a one-centimeter chip made with hyper-cooled niobium, demonstrated the new technology Nov. 28 in Elmsford, N.Y.

The U.S. Army Communications-Electronics Research, Development and Engineering Center and their partners, HYPRES Inc. and L3-Communications, demonstrated direct radio frequency digitization in the X-band frequency range using the HYPRES M132 processing chip cooled at 4 Kelvin (- 452 degrees Fahrenheit).

The broadcast selected to traverse the new media was a video clip of an aggressive military live-fire training engagement. The breakthrough could in essence take out the "middleman" in military operated X-Band satellite communications frequencies by enabling a signal to be digitized without the need for Intermediate Frequency "down" converters and other analog components, said Jack Wong, CERDEC's contract officer representative for the project.

A full enterprise military satellite terminal configuration has 56 down-converters with each converter costing approximately \$28,000, said Rick Dunnegan, project's lead technical integrator from CERDEC.

Military satellite stations around the world use down-converters to convert the superhigh frequency also referred to as 'X-Band', down to a much lower intermediate frequency. The reason: no existing modems are currently capable of conducting the demodulation process directly at the X-Band frequency range explains Dunnegan.

Modulation is the processing term for modifying radio transmissions to carry data, and demodulation is the processing term for harvesting data from radio transmissions. The technological innovations and persistence of Dr. Oleg Mukhanov, HYPRES general manager and vice president of technology and Dr. Deep Gupta, HYPRES vice president for research and development were key to the project's success, said Dunnegan.

"The Army's preeminent pursuit to push technology beyond the current boundaries can have a big payoff. Nov. 28, 2006 turned out to be the first installment to the taxpayer in reducing satellite communications costs."

For a time, the concept of using niobium in the processors posed significant safety concerns due to the need to use helium to sustain the required low temperature, which, among other reasons, caused many to dismiss niobium as a viable option, said Mukhanov. "This is no longer the case: a "cooler" now can be powered by AC (alternating current) and has been shown to be very safe."

This breakthrough can potentially lead to a reduction of satellite's power consumption, which equates to fewer dollars spent, said Dunnegan. "In the past 30-year history of satellite communications, this Army led effort is the most significant change to satellite communications worldwide."

"This is a very exciting time," said Gupta.

Jack Wong, CERDEC's contract officer representative worked with HYPRES for two years on a CERDEC small business innovative research Phase II contract as they developed the chip and refined the processes. Dunnegan took over technical integration responsibility in April of 2006.

Depot helps educate college students

By Jacqueline Boucher, Tobyhanna Army Depot Public Affairs

Johnson College, Scranton, Pa., has recognized Tobyhanna for helping educate and employ students via the Student Career Experience Program. The 2006 Community Partner Award was presented by Patrick Fricchione, president of Simplex Industries Inc., during the college's annual Community Partners recognition dinner.

The dinner spotlights a local organization, company or individual who helped the college provide a foundation of education and skills necessary for specialized employment,

career advancement and life-long learning, according to Mary Lou Miller, director of Institutional Advancement for the Scranton college. Last year's award recipient was Simplex Industries Inc.



Johnson College awarded the 2006 Community Partner Award to Tobyhanna Army Depot for helping to train and employ students studying electronics. From left, Dr. Ann Pipinski, Johnson College president, Patrick Fricchione, president of Simplex Industries, Inc., Col. Ron Alberto, depot commander, and Dominick Carachilo, vice president of academic affairs.

The depot's program started in 2000 through joint efforts of the Tobyhanna, local colleges and technical schools, American Federation of Government Employees Local 1647, and local chambers of commerce and economic development agencies.

Johnson College, Luzerne County Community College and Northampton Community College, each offering associate degrees in electronics, formally committed to the program in the first year. Fourteen students who graduated the first program are working as full-time employees of the depot.

"Working closely with Johnson, we structured a program that enables students to augment their classroom training with real-world work experience," said Col. Ron Alberto, depot commander. "Our SCEP students work on some of our armed forces' most critical command, control, communications, computer, intelligence, surveillance and reconnaissance systems."

Tobyhanna has partnerships with 12 area colleges and universities, and has graduated SCEPs with associate, bachelor and master degrees. Programs of study include electrical construction, carpentry, machining, diesel mechanics, safety, business and engineering, as well as electronics.

"Everyone who wants to work in the electronics field should take advantage of programs like this," said Mark Novack, electronics worker student trainee, Firefinder Division, Intelligence, Surveillance and Reconnaissance Directorate.

"We're delighted to recognize the many forms of support provided by Tobyhanna Army Depot to Johnson College and its students," Miller said. "The opportunities given to our students to participate in the depot's SCEP are invaluable for their career and future growth."

Students must maintain a 2.5 grade point average, be recommended by their schools and maintain high standards of conduct through their time in the program. Another Johnson College senior wanted to see what it would be like working for the federal government.

"It's a very good opportunity; gaining practical experience while still in school," said Joseph Didino, electronics worker, Firefinder Division.

Didino plans to work in the biomedical field, but said what he's learned here will be useful as he enters the workforce.

"We're honored and very grateful to count Tobyhanna among our friends and strongest supporters," Miller added.

Over the years, the depot has worked with the college to adjust the curriculum as mission requirements evolve. The depot also provides guest lecturers for various classes.

"We gain the benefit of their technical training and their fresh views on our work processes. We provide them exposure to the talent and expertise within our work force. Upon graduation, the SCEP students are converted to fulltime employment at Tobyhanna. Based on their education and prior depot experience, we get new employees who hit the ground running," Alberto said.

In total, the school has provided 83 SCEP students; 64 have majored in electronics technology or biomedical equipment technology and have been placed in our electronics mechanics ranks, Jadick explained. Johnson has also supplied the depot with electrical construction, machining, diesel mechanics and carpentry SCEPS, he added. The college estimates more than 200 graduates work here.

New facility dedicated at Germersheim

SECKENHEIM, Germany -- The 405th Army Field Support Brigade dedicated its Field Logistics Readiness Center-Germersheim in a ceremony Dec. 13.

This facility, operated by the U.S. Army Communications-Electronics Life Cycle Management Command, is a generator Center of Excellence, and the facility will be the hub of all generator reset work in the European theater of operations. The operations are completely funded by the U.S. Army Materiel Command and C-E LCMC.

C-E LCMC has also partnered with the U.S. Army Sustainment Command and the Letterkenny Army Depot to operate the FLRC-G. ASC will be the lead contractor at the facility.

The operations will represent a dramatic shift in the way generator reset work is performed in theater. While the generators will continue to be reset to technical manual 10/20 standards of complete refurbishment, the highest of all Army repair standards, a new direct exchange program with U.S. Army Europe will be implemented. Priority units will now have the opportunity to turn in used generators for reset and immediately be issued other generators from the facility's stock.

USAREUR units will no longer have to turn in their generators and then wait for that particular generator to be repaired. All of this work will be provided to the units at no cost to USAREUR.

"This facility will change the way we support USAREUR units," said Col. Bobby Ray Pinkston, 405th AFSB commander. "This new operation will significantly reduce the amount of time units wait for their equipment and will greatly enhance the service we provide to Soldiers."

The 405th AFSB conducts operations within the European theater by performing maintenance, equipment repair and storage missions during peace and war. It also integrates and synchronizes acquisition, logistics and technology capabilities for commanders and deploys on order to support joint expeditionary operations.

Improving Lives

Letterkenny cuts ribbon on new igloos



Dr. Gray, COL Smith, Senator Santorum, and Mr. James R. Jones Baltimore District, U. S. Army Corps of Engineers prepare to cut the ribbon.

LETTERKENNY ARMY DEPOT, Pa. -- U. S. Senator Rick Santorum spoke at the ribbon-cutting ceremony that recognized phase one of a two-phase project to modify munitions storage igloos at Letterkenny Army Depot.

Joined by Col. Todd Smith, commander, Crane Army Ammunition Activity, Ind., and Dr. John R. Gray, Letterkenny deputy commander, and a senior representative of the U. S. Army Corps of Engineers Baltimore District, the Senator remarked about the project's efficiencies.

"I am proud to support projects like the Igloo Improvement Project to keep Pennsylvania at the forefront of supporting our military and through our industrial base and military installations, like Letterkenny," said Santorum.

This \$5.5 million military construction project began in fiscal year 2005 with an appropriation endorsed by Santorum and supported by U. S. Senator Arlen Specter and Congressman Bill Shuster. Construction began in early 2006 and the first 10 igloos were completed in October 2006. Phase two of this project is scheduled for 2011 at a cost of \$6 million.

This project widens the doors of 92 igloos from four foot wide to 10 foot wide. It also replaces the entrance steps with concrete entrance ramps, eliminating the two-step differential between the pavement and the igloo floor level.

These modified storage igloos will allow Letterkenny to store the most advanced high-technology tactical munitions in the military inventory. Letterkenny is already the Army's premier missile depot and these improved igloos will significantly enhance Letterkenny's future capabilities.

Letterkenny is a major storage and maintenance site for tactical missiles and ammunition on the East Coast. It is a joint service operation and a first line shipment site. Letterkenny Munitions Center stores over \$6 billion in joint munitions.

The project transforms these igloos to allow more efficient handling of today's high tech munitions; eliminating the need for temporary ramps and reducing to one (from two) forklifts required to jockey today's larger munitions versus the 1940's hand-held munitions.

Partnering makes perfect at Corpus Christi

Depot symposium showcases skills

Kim Henry, Aviation and Missile Life Cycle Management Command Public Affairs

Partnerships. Some have joked that the word boils down to two words: parts and ship. From experience and in preparing for the future, the Army has learned that partnerships mean much more.

"Partnering with industry is critical today, but it is even more critical for the future," said Gen. Benjamin Griffin, Army Materiel Command commander. "I think it really gets at the industry base and how best to ensure we've got the industrial capability that we need."

Through opportunities like Corpus Christi Army Depot's Luther G. Jones Aviation Summit held Oct. 17-19, Army depots can showcase what capabilities they have to offer industry above and beyond DoD workload

"If we can complement what we do first and foremost, which is always for the Soldier, it's the right road," said Carol Bullington, CCAD Business Development chief. "When we perform commercial work it's very complementary to our mission to maintain our skills, keep our costs in line and provide the best value package of services to our war fighter. Commercial work performance is beneficial to our private industry partners and also helps us leverage our production capability to maintain skills and reduce long term costs to our Soldiers."

For Griffin, partnering has become a mission he seeks for all of AMC's depots. When he first came onboard, Griffin said several major corporations told him that if he would become more efficient in his facilities then they would do more work with him.

"Today, I think through efforts like the Aerospace Standard and the International Standard of Operation certifications and the recognition of Lean Six Sigma that partnering with those groups has occurred," Griffin said.

And what better way to show a commitment to the same quality of work as industry than to become certified in the same standards. During the aviation summit, CCAD received certification for AS 9100 International Aerospace Quality Systems Standard. CCAD is the first Army base of its type to achieve this registration. The depot received its ISO 9001:2000 certification in December 2005.

"Certifications like the AS 9100 and the ISO 9001:2000 demonstrate to partners and potential partners the level of commitment of the work force, efficiency of operations and the fact that we are good to partner with," Griffin said.

Worldwide there are over 700,000 certified to ISO 9001, while only 6,500 have achieved certification to the AS 9100 standard.

"I have not seen anything that this depot has been asked to do by anyone that they were unable to do. We're not going to stop here, we are right now working toward our AS 9110 standard," Corpus Christi Commander Col. Timothy Sassenrath said. "The message to industry customers is this: CCAD will achieve whatever it needs to do for the war fighter to meet their needs and to be a supplier, whether that is Federal Aviation Administration certification, AS 9100, 9110 or Z10, we will achieve those."

Even with certifications, it is important for the depots to assess where they have excess capacity before they offer their business to potential industry partners.

"We have to make sure that whatever extra work we do doesn't impact the capacity inside the depot," Bullington said. "Anything that we consider to do with private industry requires us to do a capacity analysis review before we undertake it. It doesn't work very well to try to do work for private industry if you do not have good schedule compliance with current DoD customers."

Partnering can almost be described as a catch 22 - you have to partner to be able to produce more in order to partner. Bullington describes the evolution of partnering at Corpus Christi in two stages. The first stage involved the partnering with the Army's current Original Equipment Manufacturers like Boeing, Sikorsky, General Electric and Honeywell.

"In 2000 time frame we began initiating partnerships with current Original Equipment Manufacturers that we have partnerships with today," Bullington said. "That was the right thing to do because we addressed current programs and our current DoD customers."

For example, Corpus Christi started partnering with GE on the T700 engine line in the 2000 to 2001 time period to compress the T700 engine parts' manufacturing lead time and depot repair turnaround time. For the T700 engine, completion of work previously took approximately 252 days and varied widely around that average.

By initiating the partnership with GE and obtaining technical engineering and logistics support as well as the induction of the RECAP program and Corpus Christi's internal Lean initiatives, the depot's artisans achieved a major reduction in repair turnaround time - down from 252 days to 78 days with little variation. GE introduced Corpus Christi to Six Sigma and together with the depot's Lean journey the resulting production increase was tremendous.

"Until you can harness something like this it would be counter-productive to attempt more work - you want to address process improvements for current customers," Bullington said.

The second stage involved partnering with industry to provide direct Corpus Christi services. "There's potential to provide commercial services, but we always undertake the necessary capacity and business review to ensure we don't impact our current customers' work," she said. "We can achieve what our new customers need and make it a win-win situation for our depot, for our current military customers and our potential new customers."

Over time the depot has invested in a variety of capabilities that they can offer to industry. The three main categories of capabilities are test and inspection, metal processing, and fabrication and repair.

Test and inspection includes the skilled artisans, engine and transmission test cells, aircraft rigging fixtures and rotor blade testing.

Metal processing is backed by the depot's trained work force, and includes a wide variety of equipment, facilities and resources including metal finishing, plating and unique coating capabilities.

"Investment in our Advance Metal Finishing Facility has resulted in an environmentally compliant, safe facility for a wide range of metal processing work," Bullington said. "It provides an opportunity for private industry, in their business decisions, to consider CCAD to perform work that may allow businesses to avert capital investment."

The final category, fabrication and repair, includes machining, composite fabrication and repair, milling, tool and dye and sheet metal work. Partnering is beneficial to all parties involved. Not only does it help industry and the depot, but it also helps the industrial base. By keeping the depot work force engaged in non-DoD work during times of peace it helps reduce the long term costs of surge during times of national emergency.

This is critical to the mission of organic depots: to provide the capability to surge and do so in an efficient manner through the best use of taxpayers' dollars.

"The bottom line will always be the warfighter. In order to meet the surge capability of the war fighter and to make sure that we are always improving our speed, lowering our cost and maintaining our infrastructure for long term service to our war fighter," Bullington said.

"We will look to commercial workload to be as efficient as possible for our warfighter: performing effective services for our commercial customers and sustaining our artisans' critical skills on behalf of our military aviators and Soldiers over the long run," he added.

"I am proud of what we have here at Corpus Christi. I am committed as the AMC commander to support what we have here," Griffin said. "But again, the challenge we've got is continuing to build these partnerships. It's critical."

DAC LSS project streamlines web-based training

MCALESTER, Okla. -- The Defense Ammunition Center has completed two Lean Six Sigma projects, one involving web-based training courses and one involving data collection from Tobyhanna Army Depot's implementation of the Logistics Modernization Program.

Tracy Sipe, Training Specialist with DAC, along with his greenbelt team developed a process to design and evaluate web based courses offered through DAC. The team implemented a new identification card process based on the generic Analysis, Design, Development, Implementation and Evaluation model.

During analysis, the designers and Subject Matter Experts developed a clear understanding of the gaps between the desired outcomes, and the learner's existing knowledge and skills. The design phase documents specific learning objectives, assessment instruments, exercises, instructional strategy, and content, which are all reviewed by SMEs.

The actual creation of the course is completed in the development phase and during implementation, the content is programmed into the Learning Management System. The course is then evaluated for accuracy and effectiveness. By implementing this process, Sipe says "major factors including quality, consistency, and accuracy have been improved and the process has already saved \$58,000, with much more projected in the future."

The development of this process has helped DAC support their customers. For example, the U.S. Army Corps of Engineers, Huntsville Center, Military Munitions Center of Expertise, requested the services of DAC to develop a web-based training module. The center is responsible for identifying training needs and providing training upon request for all of USACE regarding the Military Munitions Response Program at Formerly Used Defense Sites.

The training module designed by DAC was used as a basic familiarization training for new employees as well as refresher training for current employees.

"In the past employees have received this training through classroom type settings, involving travel and time away from work, so we expect this type of training will be cheaper in the long run and be available to more people," said John Sikes, USACE project director.

The relationship built from this USACE and DAC effort, has already resulted in other joint projects scheduled for fiscal year 2007. The effort at the Tobyhanna Army Depot on cleansing data prior to implementing the Logistics Modernization Program merges LSS with knowledge management. Tacit knowledge management captures critical knowledge from the experienced workforce and shares it with those less experienced to enhance their job performance.

Since TYAD was part of the first deployment of LMP, documenting and sharing lessons learned on data cleansing is essential to incorporate improvements in future deployments. Christine Holiday of DAC's Knowledge Management Division and a team of DAC-trained knowledge harvesters interviewed Col. Tracy Ellis, TYAD commander, in August 2004.

Ellis stated, "if we (Tobyhanna) can preclude someone else from going through the same painful lessons, we (AMC) would be much more successful. We don't need anyone to go through the same process if it can be avoided."

The goal of the project at TYAD was to determine resources associated with identifying critical legacy data, identifying non-value added work/rework and ensuring legacy data is clean prior to migrating to the new system. The DAC team shared the lessons learned at TYAD with other Joint Munitions Command installations scheduled to implement LMP. However, not until those lessons are incorporated into the business processes at subsequent deployments will improved job performance be realized.

Keen eye, soft touch needed to work with glass wires

By Anthony Ricchiazzi, Tobyhanna Public Affairs

An instructor here is training Army civilians in building cables that can transmit gigabytes of information in the form of light. Paul Baumes, an instructor in the Technical Development Division, has taught more than 100 depot employees how to build and repair fiber optic cables.

He is assisted by Dave Jurosky, another instructor. One fiber optic, a strand of special glass as thin as a human hair, can transmit more data faster than copper wires.



Paul Baumes, standing, teaches a class of depot employees at Tobyhanna Army Depot how to build, troubleshoot and repair fiber optic cables and connectors. He has trained more than 100 depot employees. Baumes is assisted by Dave Jurosky. (U.S. Army photo by Steve Grzezdzinski).

"Tobyhanna has been working with fiber optics for more than 10 years," said Cal Morgan, chief of the depot's Electronic Services Division. "We repair, fabricate and test fiber optics systems."

"I've been training field service representatives for the program manager of the U.S. Army Tactical Operations Center system, 'Reach Back' individuals and depot employees who asked for the training," Baumes said.

Reach Back individuals are those who fill a field service representative's slot at a Forward Repair Activity when the representative deploys overseas. The 40-hour course is composed of hands-on training and practical exercises in how to construct fiber optic patch cords using various connector ends and second generation tactical fiber optic cable assemblies.

A TFOCA II is a fiber optic cable composed of four fiber optic connectors mounted into a plug or receptacle. Patch cords are fiber optic cables used to link equipment to a fiber optic network.

The course is divided into introduction to basic fiber optic repair and construction, utilizing connectors in multimode cable and specifics of TFOCA II. There are two primary types of fiber optic cables, multimode and single mode. Multimode fiber optic cables use light emitting diodes to transmit data via multiple modes of light simultaneously.

"It is used for short distance transmission, such as local area networks up to two kilometers," Baumes said. Single mode fiber optics requires a laser light source to transmit data beyond two kilometers. Single mode fiber will only allow one light source at a time to be transmitted.

"Fiber optics is the wave of the future," Baumes said. "It's being used more and more as the demand for real-time data transmission continues to grow on and off the electronic battlefield.

Fiber optics training includes termination techniques, fiber optic connector polishing, testing of complete cable assemblies and troubleshooting faulty cables. Termination techniques entail constructing 4-channel cables with specially designed termini built specifically for TFOCA connectors and following procedures to ensure fiber optic cables meet specifications.



Tobyhanna Army Depot employees are learning to build fiber optic connectors like this one. The training is being provided by depot Technical Development Division personnel to improve depot support of U.S. Army Tactical Operations Centers. (U.S. Army photo by Steve Grzezdzinski).

"Connector polishing means literally polishing the end of a fiber optic strand. Once construction of a connector is accomplished, there is excess fiber strand that is scribed (or etched so excess glass can be removed with minimal damage) and removed following specific procedures. The end must then be polished so it transmits light beams as efficiently as possible," Baumes said. "Polishing is done by affixing the cable end into a 'polishing puck' and rubbing it in a figure eight motion over polishing paper."

The paper has very fine grits, from 12 microns to .3 microns, and can be aluminum oxide or diamond paper. A 400x power microscope is required to check the polished end of the glass strand.

Baumes noted that the scribing and polishing are the critical parts of the process because signal loss will be significant if these steps are not precisely accomplished. Tara Grohowski and Michael Ordonia agree that polishing is one of the most difficult challenges.

"The glass is very easy to break," Ordonia said. "If you break it, you have to start all over."

"It all comes down to a proper polish to prevent signal loss," Grohowski added.

Grohowski is an electronics worker in the Command, Control and Computer Systems-Avionics Directorate's Range Threat Division, but is currently working with Reset teams for Tactical Operations Center vehicles at Fort Lewis, Wash., and Fort Hood, Texas.

Ordonia is an electronics equipment specialist assigned to the Forward Repair Activity at Fort Lewis. Both took the training to make Reset and repair of TOCs easier, noting that fiber optics are used throughout the systems and that they will be able to show Soldiers how to make emergency repairs.

"It's good training and increases our Soldier support," Ordonia said. Baumes said the training is not difficult for the students, but the work demands patience due to the delicacy of the components involved and the need for precision and good eye sight.

"If one of the four connectors in a TFOCA II is broken or incorrectly constructed, the entire connector assembly must be redone," Baumes said. "The work is time consuming and repetitious. The construction process is very sensitive and requires a delicate touch and a good sense of feel to prevent the need for rework. It is an art form that requires repetition in the process to be successful on a regular and consistent basis."

Grohowski said it takes time to learn how to handle the fragile glass, but Baumes and Jurosky are very knowledgeable and helpful.

Tobyhanna supports PA guard during Iraq deployment

By Kevin Toolan, Tobyhanna Public Affairs

Tobyhanna Army Depot helped the Pennsylvania Army National Guard's 1-109th Infantry get ready for its recent mission in Iraq, and provided support throughout its yearlong tour there.



Members of the 1-109th Mechanized Infantry Battalion, 2nd Brigade Combat Team, 28th Division, Pennsylvania Air National Guard, present a certificate of appreciation to depot commander Col. Ron Alberto. From left, Command Sgt. Maj. Michael Urban, Alberto, Lt. Col. Michael Konzman, battalion commander, and Master Sgt. Douglas Congdon, maintenance noncommissioned officer in charge. (U.S. Army photo).

Lt. Col. Michael Konzman, battalion commander, recently visited the depot to present a certificate of appreciation to depot commander Col. Ron Alberto.

"I just wanted to thank the depot for the great support: from your teams that were over there, to the assistance back here with technical support, to the morale, welfare and recreation help to our Soldiers and families," Konzman said.

Several depot employees were among area residents called to active duty for deployment with the unit, which faced the full spectrum of wartime operations, from combat operations to base security to transportation security. The unit operated primarily from an air base in the dangerous Al Anbar province. The unit mobilized from July 2005 to June 2006 and comprised Task Force Blue Steel while in the theater of operations.

Konzman stated that the battalion had a peak strength of 1,100 Soldiers, sailors, airmen and Marines and logged over 850,000 vehicle miles while completing more than 2,000 missions including base security, area security, convoy security and other combat and

combat support operations. Other missions included providing security for the vice president and the recovery of a downed aircraft.

"The unit performed exceptionally well and that's a credit to the Soldiers and the other military personnel in the task force," Konzman added. He credited intensive training at Camp Shelby, Miss., as well as at the National Training Center, Fort Irwin, Calif., for having the unit prepared for operations in Iraq.

Tobyhanna's assistance in the maintenance arena contributed to that success, he explained. "Without Command, Control, Communications, Computer, Intelligence, Surveillance and Reconnaissance, you don't survive. From helping us obtain parts and batteries to mounts for our radios, the depot support was great."

Tobyhanna employees provided a variety of assistance to the battalion as it prepared to deploy and during its deployment, said Staff Sgt. Tim Bucklaw, Business Management Directorate. Bucklaw was the unit's maintenance shop foreman in Iraq.

The depot provided stencils to label the unit's vehicles, equipment and duffel bags for shipping from the United States to Iraq, offered technical and material support on radio communications, computer systems, Blue Force Tracking, Night Vision devices and Improvised Explosive Device countermeasures. Depot assistance enabled the unit to place all of its radio installation kits on a variety of vehicles while still in Kuwait.

Depot personnel also helped the unit secure excess laptop computers for the unit's Internet café. The café was a major morale booster for the unit's Soldiers, Bucklaw said. Additional mission computer support came directly from depot subject matter experts as well as from the depot's Forward Repair Activities in theater, which provided assistance with laptop computers, supply system ADP and other C4ISR systems.

The depot's Defense Logistics Agency representative, Mark Malinak, also provided responsive logistics support to the unit while undergoing training at Camp Shelby, and in Iraq, including securing vehicle tow straps and power steering pumps that kept vehicles running and helped to retrieve damaged or disabled vehicles. Malinak was formerly the first sergeant with the unit.

"Since I was retired and I couldn't go with them, it was the least I could do to make sure they had what they needed," Malinak said.

Michael Gelderman, an equipment cleaner in the Systems Integration and Support Directorate, also deployed with the unit and appreciated the depot's support.

"The depot was a great asset. Before the deployment, they assisted the families in getting ID cards for spouses and kids, as well as providing an information resource for the families in regards to benefits and entitlements available when activated."

New packing methods save millions annually

By Jacqueline Boucher, Tobyhanna Public Affairs

Cutting time to produce kits for a critical situational awareness system has cut costs. By using Lean methods to streamline day-to-day functions, workers assembling installation kits for Blue Force Tracking were able to reduce production time by 40 minutes per kit; subsequently decreasing expenses from \$1,500 to \$900 per kit.

The depot designs and manufactures installation kits to support the BFT system which is used in Iraq, Afghanistan, Kuwait, Bosnia and Kosovo. The kits, designed by Production Engineering Directorate personnel and built by employees in the Systems Integration and Support Directorate, provide the electrical and mechanical interfaces for the equipment.



Bob Hileman, left, and George Marhelko assemble installation kits for the Blue Force Tracking system which is used in Iraq, Afghanistan, Kuwait, Bosnia and Kosovo. Both are sheet metal workers in Systems Integration and Support Directorate. (Photo by Tony Medici).

"Blue Force Tracking is a hardened computer, with a satellite antenna that can be mounted into anything using our kits," said John Parada, mechanical engineering technician, New Technology, Research and Development Division, Production Engineering Directorate. Installation kits consist of cables, brackets and hardware, he explained. "We used Lean initiatives to cut costs and improve the process."

Initiatives such as empowering shop personnel to package and inspect individual kits bound for the BFT assembly line helped eliminate non-value added steps. Over the course of four years, the assembly process has evolved from "individual parts being thrown in a box" to each shop being responsible for prepackaging the electrical, mechanical and hardware kits before sending them to assembly, according to Parada.

"We also shaved minutes off the process by putting up a storyboard showing every piece of hardware in the kit so employees could visually match the items for shipment," said Parada.

To date, the depot has produced more than 28,000 kits for HMMWVs, tracked vehicles, and various other vehicle platforms. Customers include the Army, Marines, and United Kingdom and Australian forces.

"We fabricated more than 13,000 kits last year," said Linda Flynn, production controller, Manufacturing Scheduling Division, Production Management Directorate.

She said roughly 100 people throughout the depot are involved in making the items necessary to support the BFT effort. The assembly area is the focal point for all the parts and pieces being made around the depot.

"We're the last in line," said Bob Hileman, sheet metal worker, who has been working on BFT assembly for two years. There are three people who work in the assembly area, and they seem to prefer this arrangement to the older method, he noted. "Things flow much smoother and it doesn't take as long to do the task," Hileman said. "Now everything is where it needs to be for easy assembly."

BFT is a system that improves Soldiers' ability to see what is going on around them on the battlefield, called situational awareness, to near real time. It uses satellite communications to enable warfighters to communicate with each other and with command. The system is credited with saving lives during Operations Iraqi and Enduring Freedom by reducing the possibility of friendly-fire incidents. It's comprised of state-of-the art equipment consisting of computers using Force Battle Command Battalion/Brigade and Below software, video monitors, Position Location Ground Radios and satellite antennas.

Parada explained that Soldiers can see where they are on maps displayed on the video monitors. Communication through e-mail or radio is available via satellite, which also provides global positioning information.

"Every vehicle out there that has it [BFT] receives the same picture," Parada said. "It shows where people are and provides communication between vehicles and command posts. We actually had a general attending an event in Atlantic City send an e-mail to a HMMWV in Iraq."

Joe Healey, electrician leader in the Fabrication Support Branch, explained that implementing Lean initiatives also shifted inspection and testing procedures to individual work areas before the packages go to the assembly area. The branch provides cables, switchboxes and other electrical requirements for the kits.

"This is a team effort and everyone knows the seriousness of what they're doing," Healey said. "I'm proud of the people and the work they do on this project. "Soldiers in the field can be sure that the system is going to work as soon as it's hooked up."

Sustaining Lives

Researchers and collegians team up at this year's HENACC Conference

By Larry D. McCaskill, U.S. Army Research, Development and Engineering Command Public Communications



Joseph "Rudy" Montoya, Ph.D., U.S. Army Research Laboratory, discusses the possibility of joining the U.S. Army Research, Development and Engineering Command College Bowl team with Marco Delgado, a student from Florida International Unity during this year's HENAAC Conference.

In the Southern California world of collegiate competitions the HENAAC College Bowl VII doesn't hold the prestige of the Rose Bowl, but for students gathered in the Anaheim Convention Center, it was the equivalent of playing for a national championship.

The U.S. Army Research, Development and Engineering Command sponsored a team during the two- day interactive professional development experience designed for college freshman, sophomores and juniors. For the past six years the College Bowl has been a highly popular component of the HENAAC Conference.

Established in 1989, HENAAC is an organization that identifies, honors, and documents the contributions of outstanding Hispanic American science, engineering, technology and math professionals.

"It gives us direct exposure to students," said Jose M. Gonzalez, Chief, Modeling and Simulation Support Branch, Survivability/Lethality Analysis Directorate, U.S. Army Research Laboratory, White Sands Missile Range, N.M. "We get more time to talk and interact with them than we ever would at a traditional job fair interview."

Gonzalez served as one of the competition judges. "The team performed in an excellent manner but more importantly they were able to gel as a team with the coaches and me, which then translated to a better interview process the next day at the Career Fair. You

get to see their interpersonal communication skills, reacting with others and in conveying what they are trying to achieve."



Joseph "Rudy" Montoya, Ph.D., U.S. Army Research Laboratory, talks with members of the U.S. Army Research, Development and Engineering Command's College Bowl team during this year's HENAAC Conference.

Student participants from universities across the nation "promote" themselves to perspective team leaders. The team leaders are senior scientists, researchers and engineers from 30 corporate, government and military agencies.

"Being around these young adults will energize and invigorate you," said Gonzalez who has assisted with the College Bowl on three previous occasions. "I see their energy and willingness to take on new challenges. They are very interested in what they are doing and it shows."

After spending time with the various team leaders and their representatives, students are drafted on teams. With the draft completed, students began worked on a variety of projects ranging such as writing resumes, leadership skills and giving oral presentations. Teams were graded individually and as a whole for their performances.

"If you want to see young people bursting with energy and enthusiasm, place yourself around these young adults as they completetheir tasks," said Joseph "Rudy" Montoya, Ph. D, a physicist with ARL's Survivability/Lethality Analysis Directorate, White Sands. Montoya was the lead coach for the RDECOM sponsored team.

First time College Bowl participant, Toni Quiroz, chief, Technology, Integration & Fielding Branch, U.S. Army Communications Electronic Research, Development and Engineering Center, Fort Monmouth, N.J. served as the assistant coach.



Jose M. Gonzalez, U.S. Army Research Laboratory, discusses the mission of the U.S. Army Research, Development and Engineering Command with two possible "draftees" for during the HENAAC College Bowl.

"They are exposed to a series of impromptu challenges. This competition is not as stiff as other academic challenges are set up. They have to be able to communicate as well as solve any problem that is placed before them," he said.

"This event has really been an eye opener," said Jessica Marban, a California State University of Fresno student. "I've never did anything like this before. You learn about others and while challenging yourself in ways other than straight academics."

Montoya's involvement, like many others, is due to a mixture of professional and personal reasons.

"There was nothing like this for me when I was growing up. I didn't have access to the professional type people that I could emulate. When I come here I look at it the opportunity to reach out and help people. I understand that I am a scientist and to some I may be a role model they need to see first hand," Montoya said.

Natick provides troops holiday meals

NATICK, Mass. -- The holidays were a little bit tastier for warfighters serving in Iraq and Afghanistan thanks to a team of scientists at Natick Soldier Research, Development and Engineering Center.



Soldiers pull a tab to activate the Unitized Group Ration-Express (UGR-E). UGR-E modules serve hot meals for up to 18 warfighters without requiring kitchen equipment, cooks, fuel or a power source. (Photo by Sarah Underhill).

Over 6,000 meals, consisting of turkey with gravy, mashed potatoes, stuffing, vegetables, cranberry jelly, snacks, desserts and beverage mixes provided a Thanksgiving meal for forces operating in remote areas.

"Our goal is to provide our troops a 'taste of home' by offering a traditional holiday meal," said Sue Harrington of the Group Ration Team.

The meals are part of the Unitized Group Ration-Express, a self-heating group meal module developed and patented by the NSRDEC team. According to Peter Lavigne, project manager, the UGR-E modules provide hot meals for groups of 18 warfighters right out of the box, without the need for traditional food preparation equipment, personnel, fuel, or even electricity. The UGR-E also reduced the cost and logistical burden associated with using a field kitchen. With a quick pull of a tab, the meals are ready in 30 to 45 minutes.

"The disposable heating tray serves as a chafing dish to ensure that all warfighters receive a hot, nutritious meal in even the most austere environment," added Lavigne.

"The heating technology for the UGR-E was adapted from the heater that is currently used in the individual Meal, Ready-to-Eat ration," said Lauren Oleksyk of the Equipment and Engineering Technology Team. "Like the MRE, the UGR-E is a shelf-stable product that does not require refrigerated storage, and can be quickly delivered, prepared, and disposed of in a military operating environment."

NSRDEC, in an extremely short time period, coordinated with the U.S. Department of Transportation, Defense Supply Center Philadelphia and the Military Surface Deployment and Distribution Command in order to fulfill a request from the Multi-National Corps - Iraq to fabricate, assemble, and label these self-heating holiday meals as required to meet applicable transport guidelines within the required timeframe.

This rapid production and delivery highlights the new capability and flexibility offered by the UGR-E. The MNC-I has also requested UGR-Es for the upcoming December holidays.

3rd Battalion resets SETAF Equipment

Vehicles came to Livorno from Afghanistan

By Jennifer L. King, 405^{th} Army Field Support Brigade Public Affairs



Pasquale Corradini, an Italian employee working for the 3rd Battalion, works to reset a SETAF HMMWV from Afghanistan. Photo by Emma Sardella, 3rd Battalion Quality Assurance.

The 3rd Battalion, 405th Army Field Support Brigade, Livorno, Italy, recently completed 13 months of reset work for the Southern European Task Force on vehicles that had returned from the Afghanistan area of operations.

"This mission was an outstanding success and a credit to the men and women of this battalion – to their dedication, commitment and talent," said Lt. Col. Harvey Robinson, 3rd battalion commander. "The skill of the workforce was tested on some occasions, but their professionalism and dedication persevered."

Chief Warrant Officer John Dibias, 173^d Airborne Brigade Combat Team maintenance officer, was very impressed by the work done by the 3rd Battalion.

"The 3rd Battalion of the 405th AFSB did a phenomenal job supporting both the brigade and SETAF," DiBias said. "Since signing for the equipment that was reset by the Livorno

team, we have used the equipment in training throughout Italy and in Germany with no problems.

"I was recently approached by another warrant officer in the brigade and he made the remark, 'I do not know what we would have done without their help.' The bottom line is that they did a fantastic job, and we are very pleased with the quality of work and the support received."

In addition to being used for training for future deployments, the reset equipment will be utilized to support airborne operations and for daily administrative and logistical purposes. The reset of equipment is a long and involved process that includes numerous steps at the battalion level.



Reset work on HMMWVs returning from theater includes stripping them down to their frames, repairing and rebuilding. Photo by Emma Sardella, 3rd Battalion Quality Assurance.

Each piece of equipment goes through an average of nine steps:

- 1. receive the equipment from the field
- 2. perform an initial inspection of the equipment
- 3. requisition any repair parts needed for the process
- 4. receive the repair parts
- 5. execute all vehicle repairs
- 6. paint the vehicle as required
- 7. provide the vehicle to quality assurance personnel for final acceptance verification
- 8. perform a joint technical acceptance with the receiving organization
- 9. coordinate transportation of the equipment back to the receiving organization

The most important piece of the process is the quality of the initial inspection to technical manual 10/20 standards," said Curtis Dabney, 3rd Battalion director of maintenance. "We are blessed to have a workforce that has an average tenure of 20 years experience doing this so this kind of work is very routine for them."

The reset work done is just one of many missions that the 3rd battalion does to support SETAF.

"We are responsible for maintaining SETAF's leave behind equipment when they deploy," Dabney explained. "We also provide logistics support and logistics assistance representatives to support them in automotives, communications, and other areas."

Other support to SETAF includes communications and electronics, small arms and fire control maintenance onsite in Vicenza, Italy, assisting returning units, and storing training ammunition in Livorno.

"They are extremely beneficial in the support they provide (to SETAF)," concluded DiBias. "Whenever there is a need for additional maintenance, I am confident that we can call on the 3-405th AFSB team."

Students get WISE

NATICK, Mass. -- Over 200 7th-grade students and their teachers visited the U.S. Army Soldier Systems Center here Nov. 15 as part of the Women in Science and Engineering program.



Wilson Middle School students take notes for an assignment during their tour of the U.S. Army Soldier Systems Center in Natick, Mass. on Nov. 15. The Women in Science and Engineering group hosted the tour. (Photo by Kathy Evangelos).

The goal of WISE is to reach out to students in order to inspire them to become future scientists and engineers, said Kathy Evangelos, program integrator, Natick Soldier Research, Development and Engineering Center and coordinator for the program. This was the 8th annual 'science and engineering' tour for the Wilson Middle School in Natick.

Lt. Col. John Dailey, NSRDEC, spoke about how the science and engineering done at SSC touches the lives of warfighters throughout the world. Various programs and technologies from the NSRDEC, U.S. Army Institute of Environmental Medicine and Product Manager Force Sustainment Systems were showcased during the students' visit. Some of the areas included: environmental and human research testing in the climatic chambers, sensory evaluation of rations, atomic force microscopy, ballistic protection and the Force Provider program.

As their assignment, the students had to imitate reporters for a current science magazine, asking specific questions of the subject matter experts and taking extensive notes. Both students and teachers commented that this visit was one of the best field trips and learning experiences they ever had.

Evangelos said, "This program is important because it gives the students an opportunity to see how scientists and engineers make a difference in the lives of our warfighters. It also opens their minds to careers in fields they may have never thought of before."

Entering its 10th year, the WISE program has reached over 2,500 students in the local community through visits such as this one, classroom lessons in local schools, and support for school-sponsored science fairs and career days.

"These children will be the inventors of future technology," Evangelos said,"...the scientists and engineers of tomorrow. It's important that we encourage that."

403rd delivers machine guns in Korea, aviation units get brand new weaponry

By Nikki St. Amant, ASC Public Affairs



Larry Schmidt walks 2nd Combat Aviation Brigade Soldiers through the installation of the new M240H machine gun mount on a UH-60 Blackhawk helicopter in Korea in October. Schmidt is part of the TACOM-led fielding team that distributed more than 100 of the new weapons systems in Korea.

SOUTH KOREA -- The Army Sustainment Command facilitated fielding some brand new, but not quite gift wrapped, mounted machine gun weapon systems to U.S. Army aviation units in the Republic of Korea this fall.

Though a little early for Christmas, the systems were still greatly appreciated by the troops on the receiving end. With the assistance of ASC's provisional 403rd Army Field Support Brigade, a TACOM Life Cycle Management Command-led team distributed more than 100 M240H weapon systems to Army units South Korea in October.

The M240H replaces the standard M60D mounted machine gun used by Army aviation units since 1957. The M60D was widely used in and gained notoriety for its service in the Vietnam War, but complications with reliability, especially in dusty or sandy locations were common. Sgt. 1st Class Kenneth Salazar, one of the TACOM LCMC fielding team members, said the new weapon system greatly improves upon the reliability and functionality of its predecessor.

"Many of the old M60Ds have outlasted themselves. Within the aviation community, there was a strong need for a more reliable weapon system," he said. "The new M240H is easier to maintain, faster in fire power, and versatile."

The M240H has a maximum rate of fire of 650 Rounds Per Minute, compared to the 550 RPM put out by the M60B; has an improved flash suppressor, Picatinny rails, an extended charging handle; and can convert from a door-mounted weapon to a removable, ground configuration in less than a minute. Delivery of this and similar much needed equipment to forces in the ROK is one of the 403rd AFSB's many responsibilities.

Paul Wiatr, a logistics specialist and part of the brigade's Acquisition, Logistics and Technology Branch said his group spends at least 60 to 75 percent of their time facilitating visits by technical specialists and fielding teams, enabling units and Soldiers to focus on their warrior tasks and avoid having to use valuable time to coordinating with multiple commands and program managers.

"We're working six or seven of these visits right now," Wiatr said. "Each one involves so much work to make it happen. We coordinate transportation, theater clearances, shipment of equipment, security and accountability for equipment, Status Of Forces Agreement clearances and anything else needed to get the training and the equipment to the troops. And all of it is done in the shadows. Some people call us a program manager, but I think facilitator is a more appropriate term."

Soldiers on the receiving end agree Wiatr's work makes their job easier. "Keeping units supplied with serviceable equipment is absolutely vital," said Chief Warrant Officer Eric Burns. "That applies to the war on terrorism, our mission here in Korea, and any other endeavors in which the Army participates. I am very impressed by the fact that the Army provided us with brand new weapons and the efficiency with which they were delivered to us."

Burns is a UH-60 Blackhawk pilot and the arms room officer-in charge for C Company, 2nd Battalion, 2nd Aviation Regiment. "The M60s we had were in pretty rough shape," he said. "The Soldiers who used them regularly complained about performance and it was extremely difficult to keep them in an acceptable readiness rate for a combat-oriented unit. Conversely, the M240Hs we received were immaculate."

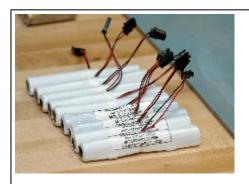
Burns went on to say "It all went a lot more smoothly than I anticipated, and the proficiency of the fielding team set the precedent. It's really gratifying to be part of a unit that does receive highly sought after, brand new equipment. It improves morale. Soldiers get excited when they get new equipment, especially weapons."

The fielding team went on to Japan, Hunter Army Airfield, Ga., and Fort Riley, Kan., with another mission scheduled for National Guard units in New Jersey before the holidays.

Saving Lives

Tobyhanna develops cheaper, better battery packs

By Anthony Ricchiazzi, Tobyhanna Public Affairs



Two AA size batteries are joined together at Tobyhanna Army Depot to make a battery pack for the AN/APX-118 IFF identification friend or foe transponder. Tobyhanna is producing thousands of the packs for the Army and Navy. (U.S. Army photo).

Quick delivery and best price earned Tobyhanna a mission to build battery packs critical to a friend or foe transponder.

Technicians in the Transponder Branch here are building hundreds of battery packs for the AN/APX-118 Transponder. The branch is part of the Avionics Division, Command, Control, Computers/Avionics Directorate.

The APX-118 is an identification friend or foe digital transponder with improved reliability over non-digital transponders. It is used by the Navy on submarines and ships,

and by the Army on aircraft. In addition to friend-or-foe identification, the system is also used for the safe operation of military aircraft in civilian airspace.



David Spiotto, an electronics mechanic, solders a diode onto a battery terminal. Two of these batteries will be joined together to form a battery pack for the AN/APX-118 IFF Transponder that is used by the Navy on submarines and ships, and by the Army on aircraft. (U.S. Army photo).

"The battery packs maintain cryptographic information in the APX-118s when aircraft are not in use," explained Michael Jones, branch chief. "If the battery packs were available, then the information would have to be programmed into APX-118s every time they are used."

The battery pack is composed of two batteries that resemble AA batteries, but have a higher voltage, plus wires, electronic components and connectors to integrate them into an APX-118.

"There is a high demand for them in combat areas, so delivery time is critical," Jones said. "We can produce them faster than the previous manufacturer at about a 50 percent cost reduction." Jones attributed the time and cost reduction to Tobyhanna's efficiency, labor rate and customer service.

He said Lean principles have been applied to this asset to eliminate non value added steps and increased throughput. "We're working smarter, not harder," he said.

"Previous battery packs were unreliable and failing in the field," added Kevin Jones, electronics mechanic. "We came up with a highly reliable product."

Reliability is important because even though they have a shelf life of two years, the packs can degrade quickly in hot desert environments, said Dave Iverson, the lead electronics mechanic. The packs are expendable and replaced when the batteries expire, but the components are recyclable.

The work involves welding and soldering leads, connectors and diodes to two batteries, then wrapping them together to form a pack.

"The welding is the most difficult part of the job," said David Spiotto, electronics mechanic. "We built simple wood fixtures to make the job easier and faster."

"Right now we're producing about 300 per month," said Mike Jones. "In December, we're going to increase that to about 400 per month. We're planned to produce 6,000 of them for the Army and Navy in fiscal year 2007."

Army official says aerial common sensors a must

FORT MONMOUTH, N.J. -- Ground commanders need relevant information in time to make good tactical decisions and they will get it because the Department of Defense recently recognized the Manned Intelligence, Surveillance and Reconnaissance aircraft will remain necessary, a leading Army system engineer told a crowd of more than 220 industry representatives here.

The Army is upgrading the current fleet of ISR aircraft so they remain relevant for commanders and is preparing highly advanced systems for when existing aircraft fleets reach the end of their lifespan, according to Program Executive Officer for Intelligence, Electronic Warfare and Sensors, Edward T. Bair, during the Airborne ISR Industry Day.

In January, the Army announced the cancellation of the Aerial Common Sensor contract, but not the program. The aircraft fleets Aerial Common Sensor was intended to replace include the Army's Guardrail Common Sensor and Airborne Reconnaissance Low and the U.S. Navy EP3-E "Aries II."

The contract was terminated in the aircraft's advanced design stage when the Army and industry partners realized that the selected aircraft was unable to host all of the required sensors and subsystems.

"Aerial Common Sensor is looking to re-start in the 2009 timeframe," said Bair.

After the contract termination, Secretary of the Army Francis J. Harvey ordered a, "time-out," period prior to re-initiating future contract actions during which the DoD led a study on how to provide timely and relevant information to war fighters using airborne ISR, including the impact of new technologies.

When asked about particulars of the study, or insight regarding the future direction of the ACS program by audience participants, Bair declined, citing national security classification and that higher level decisions are still pending. "It's a work in progress,"

Bair said. "There's still a lot of discussion going on with regard to airborne ISR...the study reaffirmed the need for manned assets." Neither space-based, "non air breathing," satellite surveillance systems or unmanned aerial vehicles alone provide the range of capabilities needed to meet either the Army's or Navy's concept of operations, he said.

The future ACS system will be an improvement because its long endurance and broad array of sensors will better serve ground commanders. Also, the emphasis will be on building a capability that operates jointly using modern communications systems and systems engineering practices, according to Bair.

The result will be airborne ISR systems that connect seamlessly to ground stations, satellites, and other intelligence systems, be they from the Army or other branches of service.

"The study was all focused on the Brigade Combat Team or theater commander making timely and responsive tactical decisions," said Bair. To accomplish that goal: "There is an absolute need for teaming. We will include manned and unmanned aerial vehicle teaming in our future plans."

"We see the biggest challenge from the program level will be to synchronize with all the interdependent programs," said Bair.

Examples include the Predator, Global Hawk, and Future Combat Systems Class IV unmanned aerial vehicles as well as the Army's Warfighter Information Network-Tactical and battle command applications - all of which will connect to expand the ability of war fighters to access, "source data," or processed intelligence. The Department of Defense also directed that funds allocated for the ACS program be redirected to sustain and modernize existing aerial ISR fleets to address current challenges, said Bair.

ACS product manager's officer personnel briefed the audience on lessons learned from the prior SDD phase and risk areas being studied. Future requests for information will be forthcoming and will provide a means for further discussion on ACS with Industry. Product directors for Airborne Reconnaissance Low and Guardrail Common Sensors briefed the industry representatives on potential roles for industry participation in efforts to modernize both fleets. Planning is underway for both fleets to receive enhancements in the systems architecture, communications and sensor payloads.

Technicians restore radar's reliability rate

Unprecedented field repairs in S. Korea during 4-month deployment bring Firefinders back online

By Jacqueline Boucher, Tobyhanna Public Affairs



Positioning system verification procedures are performed on an AN/TPQ-37 Firefinder radar in South Korea by Tobyhanna Army Depot personnel. (U.S. Army photo by Constantine Georgiades)

Depot employees joined forces with technicians throughout the Communications-Electronics Life Cycle Management Command to reset two AN/TPQ-36 and four AN/TPQ-37 Firefinder systems assigned to the 2nd Infantry Division.

At the request of the mission commander, the Army Firefinders remained in South Korea while the Counterfire Radar Reset Team spent four months making on-site repairs and upgrades to bring the radars back to mission-capable status. Officials said high operations tempo and environment had affected the aging systems; they were operational, but not reliable.

"The [mission] commander requested the assets remain in-theater so the team deployed with equipment necessary to bring the radars back online," said Daniel Shea, chief, Firefinder Division, Intelligence, Surveillance and Reconnaissance Directorate.

In addition, team members spent time training and mentoring the Soldiers that work on the radars, he said. Firefinder automatically locates the firing position of hostile mortars, artillery and rockets. There are two models-the AN/TPQ-36 is a highly mobile radar set capable of detecting weapon projectiles, and the AN/TPQ-37 quickly locates long-range artillery and rocket launcher positions.

Tobyhanna handles a large percentage of the radar's reset, rebuild and recapitalization workload. In an after-action message, the mission commander told Army leaders that team members represented the professionalism and mission focus of their command.

"We have observed the best example of mission-focused teamwork from multiple supporting agencies in accomplishing a sensitive and complicated mission," said Maj. Gen. James Coggins, 2nd ID commander.

"The reset team was a sterling example of the dedication our Soldiers, Department of the Army civilians and contractors exhibit daily throughout our Army, and I, for one, want to say thanks."

The general also said that the team's technical and mechanical expertise is "without peer and you should be proud of the professionalism and skills that each individual team member exhibited." The radars hadn't undergone a depot overhaul in several years and it took a site survey team a month to troubleshoot the systems, determine status and the best course of action for repair.

"Every antenna out there needed work," said Nancy Telesco, electronics mechanic and member of the site survey team. "We evaluated what was wrong and attempted some of the repairs, but so much more needed to be done."

The repair team was on the ground ready to work within a week. What they didn't take with them, they found on the installation or acquired from local vendors. The motor pool building was large enough to accommodate the antenna and had an overhead crane that allowed them to accomplish tasks not normally done in the field. About \$1.5 million worth of parts were forwarded to the team to be installed in the radars.



Ronald Feist, a sheet metal mechanic in Tobyhanna Army Depot's Systems Integration and Support Directorate, repairs an AN/TPQ-37 Firefinder radar while deployed to South Korea. (U.S. Army photo by Constantine Georgiades).

"The persistent efforts of all the team members allowed radars to be placed into a mission status, until a swap out of the systems could take place," said Chief Warrant Officer Eric Adair, assistant product manager, Product Manager Radars, Fort Monmouth, N.J.

"From shipping and tracking critical repair parts to the repair of the systems and all the ancilliary equipment, the team worked six days a week to ensure the mission was accomplished." He added that once the radars were repaired and upgraded, the team trained and mentored the Soldiers with "invaluable insights into radar maintenance and operations."

The Soldiers assigned to the radars helped make repairs, often working 10 hours a day, six days a week.

"We worked side-by-side with the Soldiers to teach them some of the finer points of the system," said Constantine Georgiades, electronics mechanic leader, Firefinder Division.

"We were able to use the overhead crane to change out trailers on the 37s," he said, explaining that the trailers weigh up to seven tons each. In addition, sheet metal workers repaired shelters that were mounted on the back of HMMWVs and did minor maintenance on the TPQ-36s.

"This was a unique experience because we performed in-depth, depot-level maintenance not ordinarily done in the field," said Nicholas Prokopchak, sheet metal worker, Industrial Services Division, Systems Integration and Support Directorate. "A big part of our job was making sure the systems were sealed and rain tested."

Eric Mateyka, another sheet metal mechanic, helped modify 5-ton trucks and change an antenna radom face. "We worked on anything that needed sheet metal work such as broken inserts and screws," Mateyka said. "Changing the antenna radome face was a big project and a procedure we've never done in the field."

The team also installed new laptop computers in the AN/TPQ-36s. "The Soldiers had never seen one integrated into a Firefinder before so they were very interested in it once we got it hooked up and running," said Georgiades.

"They were thrilled to see how it made the equipment more efficient and reliable." The mission of the Firefinder systems on the Korean Peninsula is critical to defeating enemy long-range artillery systems and to assist in acting as a deterrent during the Korean Peninsula Armistice, according to Adair. The mission of the 2nd ID is to train and remain ready to "fight tonight" and deter aggression as part of the Combined Forces Command and the Republic of Korea-United States Alliance.

"Pass my thanks to all involved in this critical mission," said Col. Ron Alberto, depot commander. "I appreciate the dedication and commitment of our folks who went half-way around the world to repair and upgrade critical Firefinder systems. I appreciate our folks working with Soldiers to increase their maintenance awareness."

3rd Battalion installs armor on 173rd Airborne Brigade Combat Team vehicles *Personnel deployed from Livorno to Vicenza to complete mission*

By Jennifer L. King, 405th Army Field Support Brigade Public Affairs Officer



Mirco Daversa (left), Marco Gragnani (on creeper) and Maurizio Barsotti (rear) work to install armor on a 173rd Airborne Brigade Combat Team vehicle. (Photo by Lewis Courtney, U.S. Army Garrison Vicenza)

The 3rd Battalion/405th Army Field Support Brigade in Livorno, Italy, just completed a new mission to install armor on vehicles for the 173rd Airborne Brigade Combat Team.

The battalion installed armor on 14 vehicles, which the 173rd will be using for drivers' training. In addition to installing the armor, battalion personnel trained with the Southern European Task Force Installation Materiel Maintenance Activity workforce on the installation of the armor. The entire mission was completed in a single week.



Bruno Barletta, a quality assurance equipment specialist, was just one of the employees who deployed from Livorno to Vicenza to complete the mission for the 173rd. The Livorno team finished their mission in just one week. (Photo by Lewis Courtney, U.S. Army Garrison, Vicenza).

"The quick completion of this mission is a testament to the talent, dedication and commitment of our local national workforce here at the 3rd Battalion," said Lt. Col. Harvey Robinson, 3rd/405th AFSB commander. "I am extremely proud of their efficiency and effectiveness in support of our customers."

"Now that the armor has been installed, these vehicles will be utilized for training the Soldiers of the 173rd on the safe operation of up-armored HMMWVs," said Curtis Dabney, 3rd Battalion director of maintenance. "This training will help keep the Soldiers safe as they transition to combat environments and have to drive the armored vehicles.

"This mission is another example of the logistical support we provide in support of SETAF and the war on terror," Dabney concluded.

Up-armoring military vehicles is an extensive process. All suspension components on the vehicle must be removed and replaced with heavy duty suspension to support the increased weight of the add on armor. After the suspensions are replaced, the actual armor is installed on the exterior of the vehicle. In addition, each vehicles gets a new air conditioning system.

"The work that we do is not easy, but it is worthwhile," said Robinson. "We are proud of what we accomplish every day for the Soldier, and I am proud of my team for doing their jobs so well."

AFSBn-Qatar refurb site keeps Stryker in the fight

The first Stryker repair and refurbishment facility worldwide, will soon increase production rates from four to six vehicles per month as it refi nes parts ordering and repair processes Camp As Sayliyah, Qatar, saving the Army more than half of the acquisition cost of a new vehicle.

The Army Materiel Command facility first opened its doors for business early summer, 2005, in partnership with General Dynamic Land Systems, Detroit, Mich., repairing and returning battle damaged vehicles back to the fight with a professional team of engineers and skilled technicians.

"A repair facility in theater is essential support for the Stryker Brigades in Iraq, providing rapid regeneration of combat power. Qatar was chosen because of its close proximity to air and sea ports, a large industrial base near the Army camp and other state-of –the-art equipment here," said Lt. Col. Maxine Girard, 401st Army Field Support Battalion-Qatar commander.

GDLS has changed the production and inspection process on battle damaged vehicles and now inspects the vehicle in Iraq, ordering critical parts for the vehicle before it is transported to Qatar saving "down time" on each vehicle, working with Stryker facility assets at Fort Lewis, Wash.

"We have a goal of having parts here on the ground in Qatar when the Stryker arrives from Iraq, speeding up our repair process even more," said Tim Armstrong, GDLS supervisor.

"We have bench stock for hardware, with a minimum and maximum requirements list to streamline our process. Replenishment orders are automatically sent when the minimum is met, which also speeds up the parts flow. All materials, suspension parts, spawl armor; everything we know we will need for repairs and replacement, are at the site. We are now starting to reap the benefits of those changes," he said.

Repairing the Stryker is a challenge as each vehicle has unique battle damage. "This is like a custom shop building custom cars. Every vehicle is different and everyone on the team is a skilled craftsman," Armstrong said.

The power pack [engine and transmission] is pulled out at the Stryker Forward Repair Activity, Balad, Iraq and sent to the states for re-build or service for whatever it needs. Repaired/replaced power packs are then sent back to Qatar for supply stock, so when the body and structure work are completed, a power pack is installed in the vehicle.

The suspension and drive train are critical and automatically replaced in every Stryker, Armstrong said. The used systems are packed up and shipped to the states for rebuild/replacement and new systems installed after the body work is completed.

The repair shop has been up-graded since start-up with better lighting, electrical upgrades for the welding shop and machine tools, and more space was added to accommodate parts storage.

Armstrong said that most of the Stryker Team is deployed from the Fort Lewis area. When production increases to six vehicles per month, six teams will be on line for repairs at six assembly areas. One skilled welder is also assigned to each vehicle.

Welding is a critical and exact process and requires the most time. It's the bottleneck in the repair process.

"We are expanding the welding area to accommodate more vehicles," said Armstrong. "When the vehicle arrives from the welder's bay, one team is assigned to the vehicle from the ground up. They work this one vehicle all the way through to the final inspection and return of the vehicle back to the Army."

"It gives the teams a sense of responsibility first, and a feeling of pride that they took that vehicle-no matter how extensive the damage was-they fixed it and returned it to the warfighter," Armstrong said.

In September, workers repaired a vehicle that had already been through the process and have another vehicle in the yard that is on its second rotation through the site. A third vehicle is currently on its way to Qatar for the second time, according to Armstrong, making six repair processes rather than the Army buying six new vehicles.